
FOR INSTRUCTOR PURPOSES ONLY

LEARNING OBJECTIVES

- Experience a typical GA learning experience through active learning exercises.
- Gain an introductory understanding of a new skill or insight that can be utilized in a professional setting.
- Learn from materials created in conjunction with an experienced web-developer.
- Describe the difference between front-end and back-end code and the basic components of HTML, CSS, and Javascript.
- Use HTML and CSS to mark up a basic webpage.

FOR INSTRUCTOR PURPOSES ONLY

INSTRUCTOR TIPS

- There's a lot to fit into this class! Don't worry about diving too deep—this should be an introductory lesson.
- Keep track of time, so you can get through all the content.
- Be aware of differing skill levels and try to differentiate as needed.

FOR INSTRUCTOR PURPOSES ONLY

MATERIALS

- Laptop
- Google Chrome
- Sublime Text or Atom

FOR INSTRUCTOR PURPOSES ONLY

PRE-WORK

- Install either Sublime Text 3 or Atom on to computer (choose one before telling students which one to install).
- Write learning objectives on board.
- Make sure wifi network and password (GA Guest, yellowpencil) is written on board, since students will need to be online to use codepen.io.

CODING 101: HTML + CSS

Insert Instructor Name

Title, Company

CODING 101: HTML + CSS

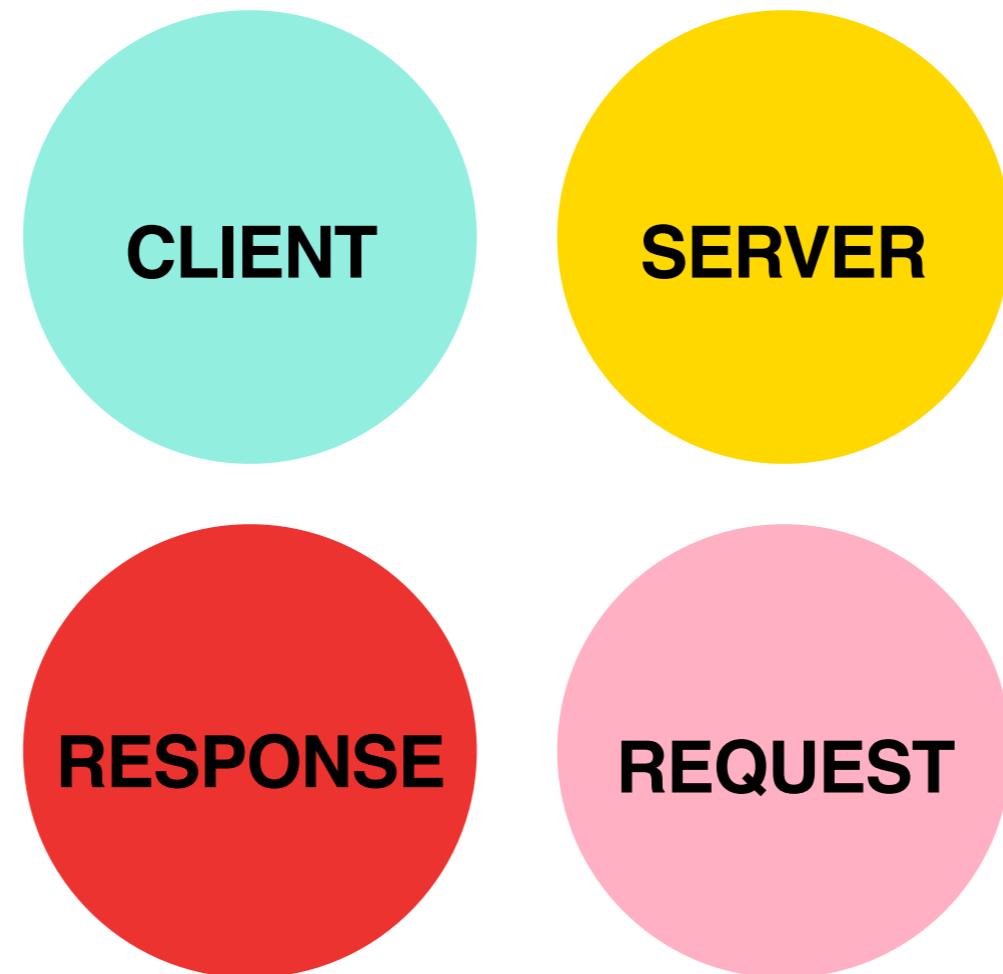
LEARNING OBJECTIVES

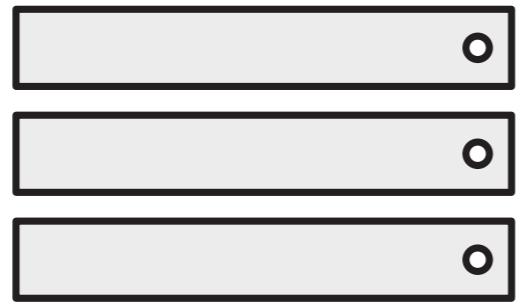
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WWW

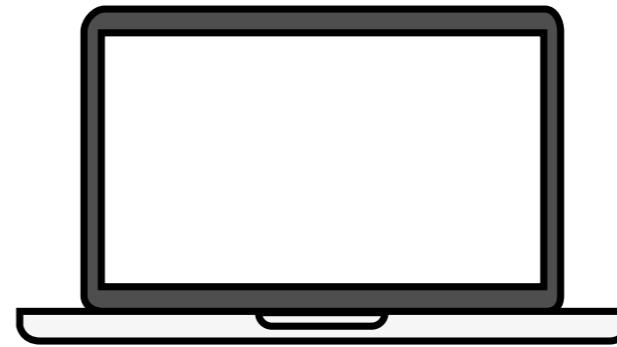
**HOW DOES THE
WORLD WIDE WEB
WORK?**

WWW





Server



Client

IP address 12.345.67.890

Facebook.com

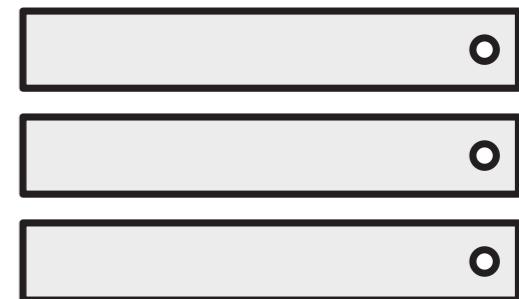
google.com = 74.125.224.72



Client



DNS Server

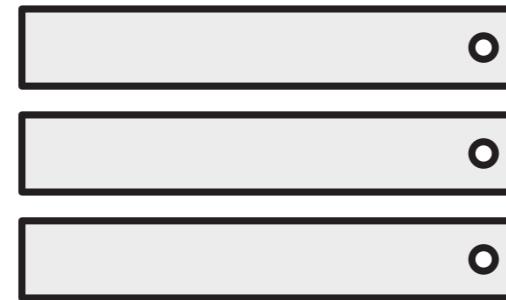


Server

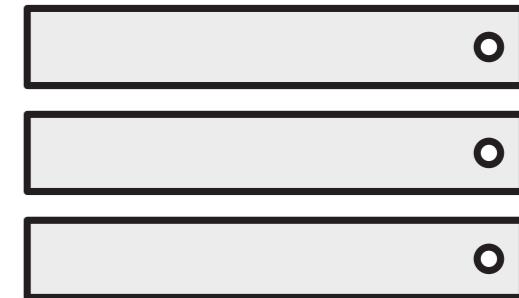
google.com = 74.125.224.72



Client



DNS Server

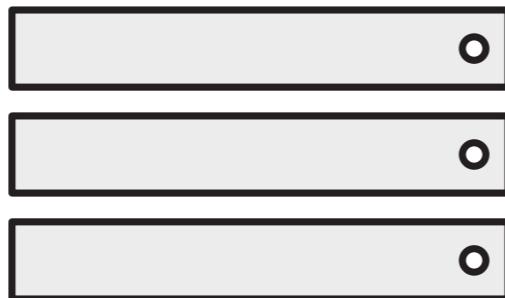


Server

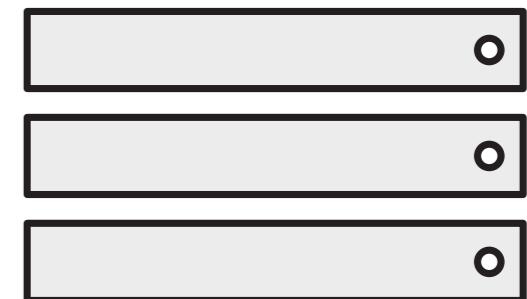
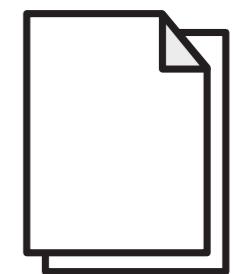
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Client

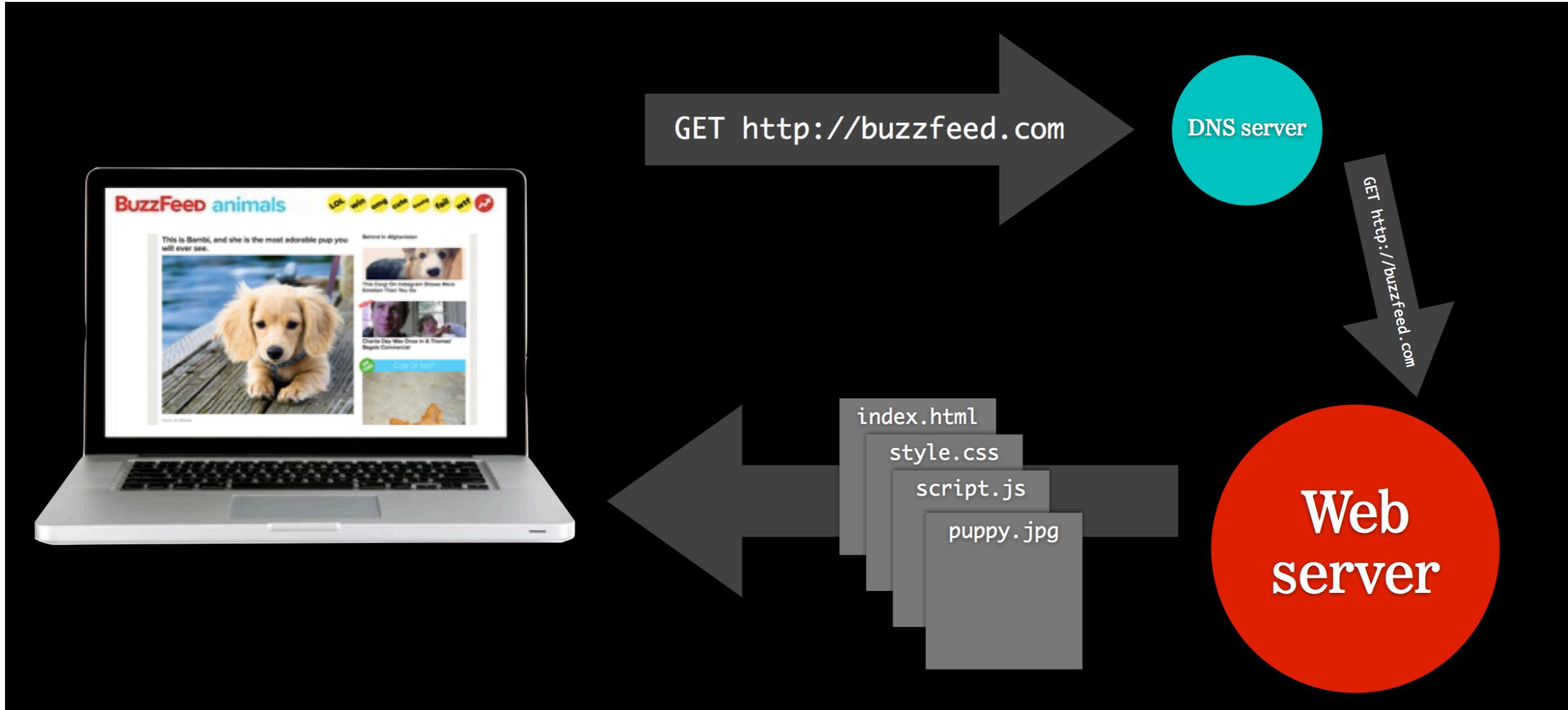


DNS Server



Server

WWW



SO, WHAT'S WEB DEVELOPMENT?



WHAT'S WEB DEVELOPMENT?

- The creation and management of both websites and web-based applications
- Made up of the Front End and Back End
- Most Developers will try to convince you that it is magic, but it is mainly editing text files (coding / programming), and solving problems (crying)

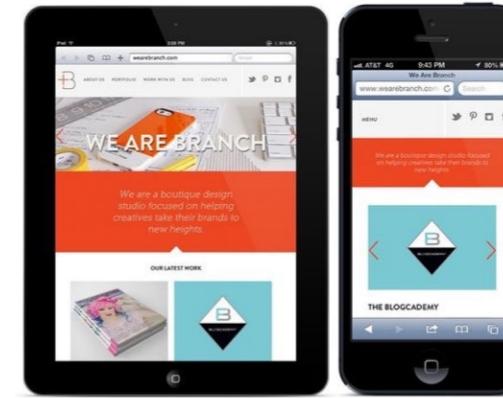
WHERE DOES FRONT END WEB DEVELOPMENT FIT IN?

WEB PRODUCTION WORKFLOW

WEB PRODUCTION WORKFLOW



- ▶ Take the design and turn it into code and assets
- ▶ Uses HTML/CSS to create the structure for a page and add styles
- ▶ Add interactions with JavaScript
- ▶ Other responsibilities: accessibility, performance, cross-browser and cross-device functionality



WHAT DOES FRONT END EVEN MEAN?

“A mix of programming and layout
that powers the visuals and
interactions of the web.”

IN SUMMARY...

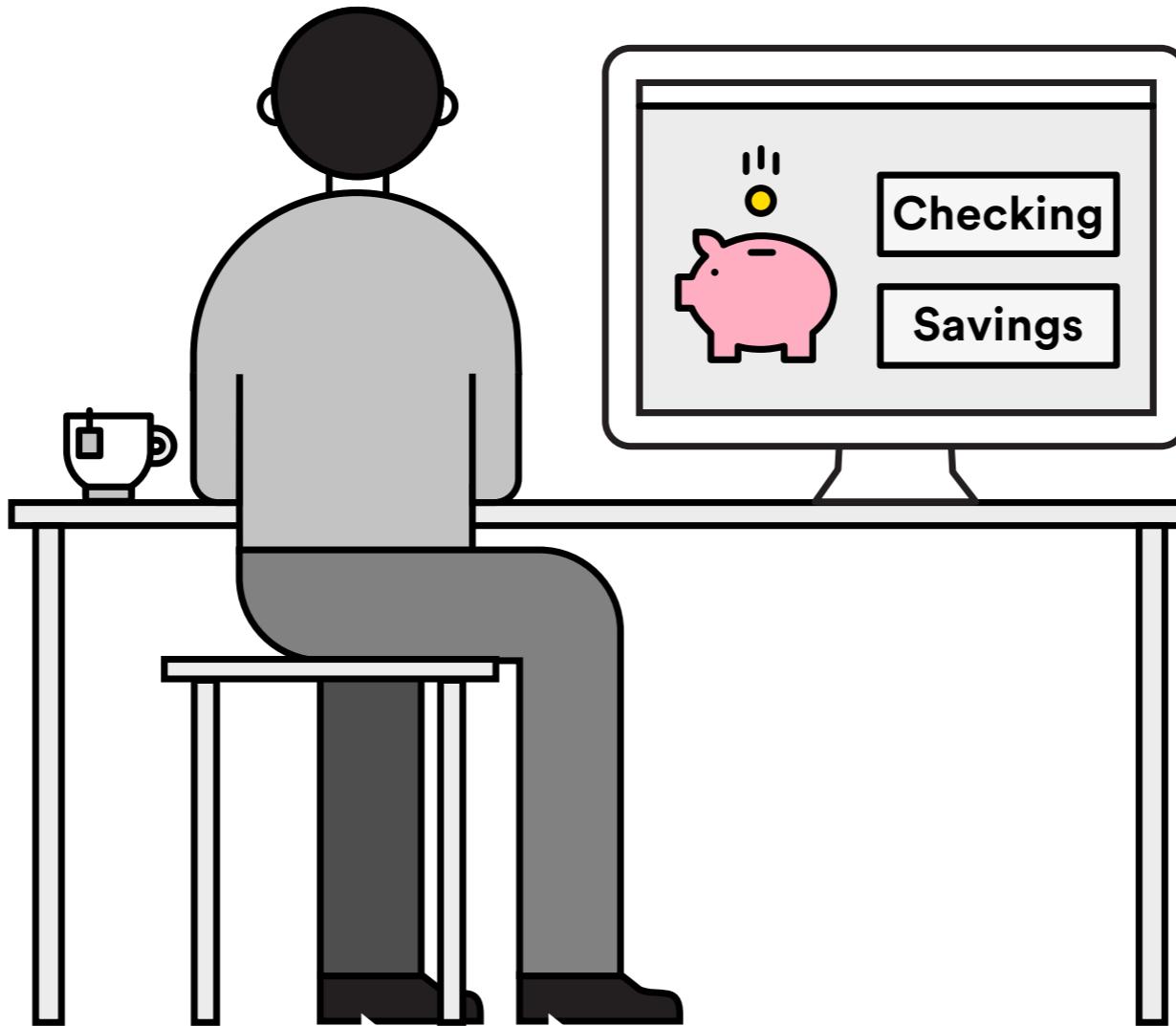
- The Front End is what the user sees
- It powers the visuals and interactions of the web
- It is meant to be pretty, but doesn't always happen that way
- Made up of HTML, CSS and Javascript

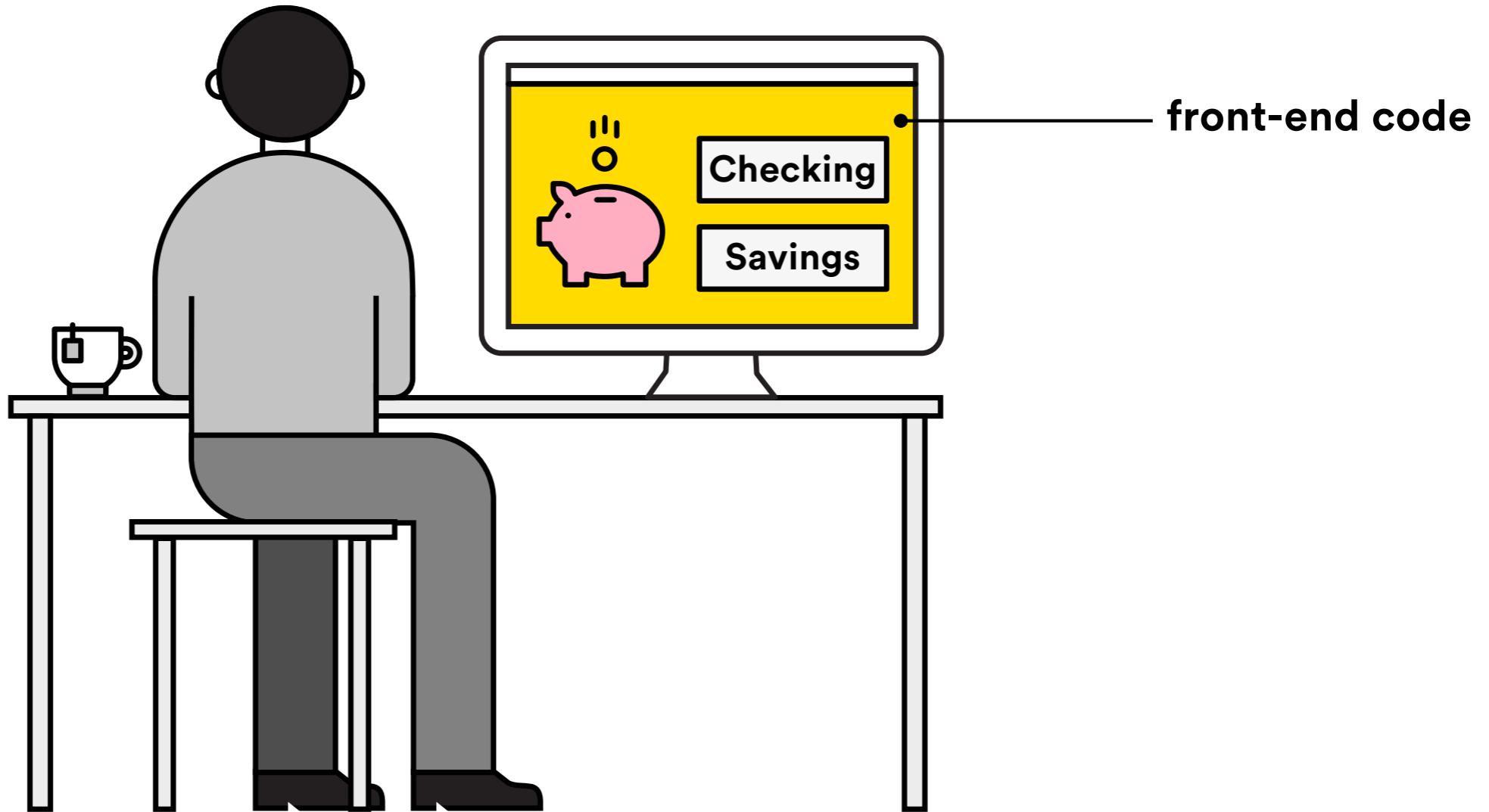
THE BACK END

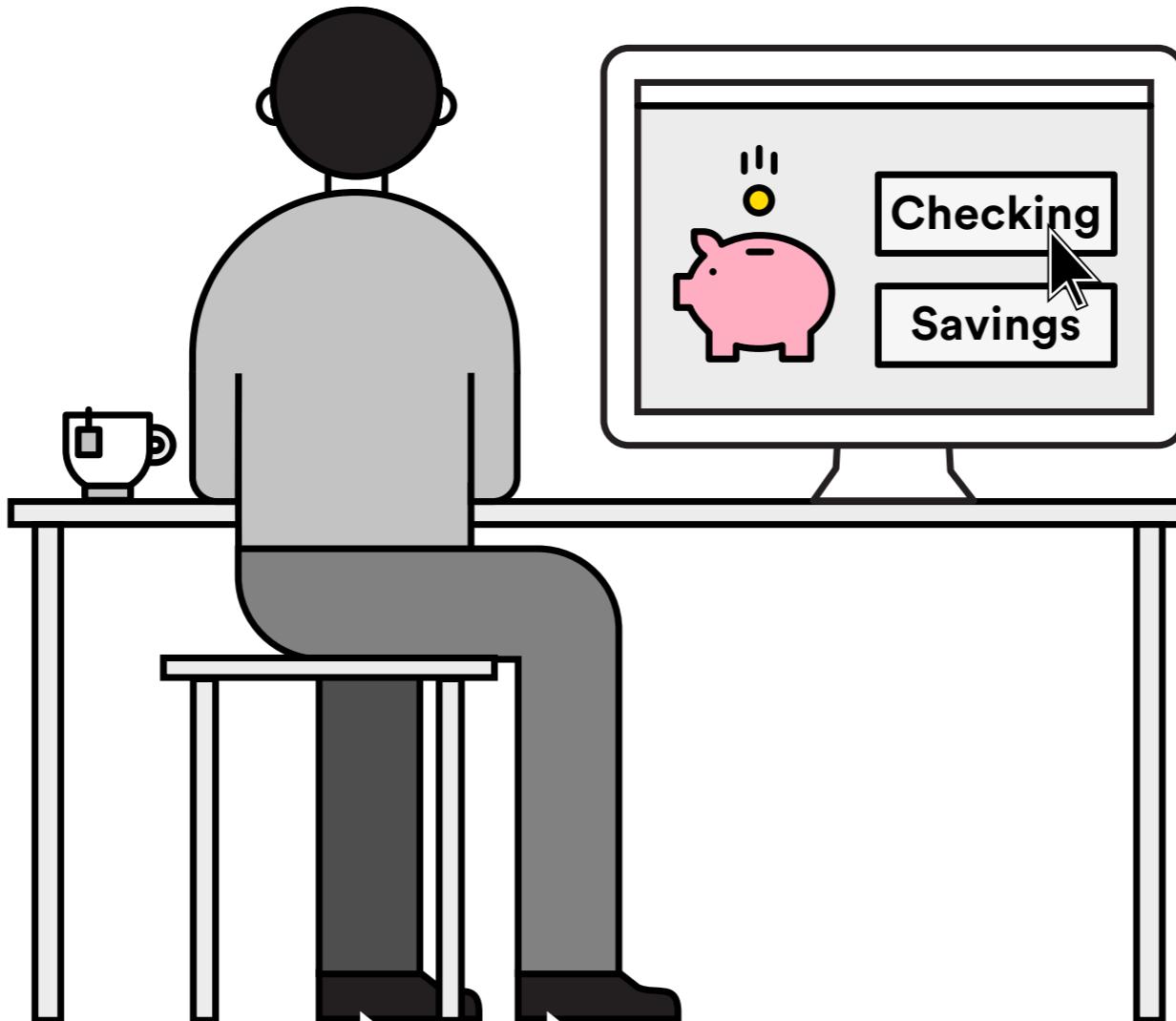
WEB DEVELOPMENT

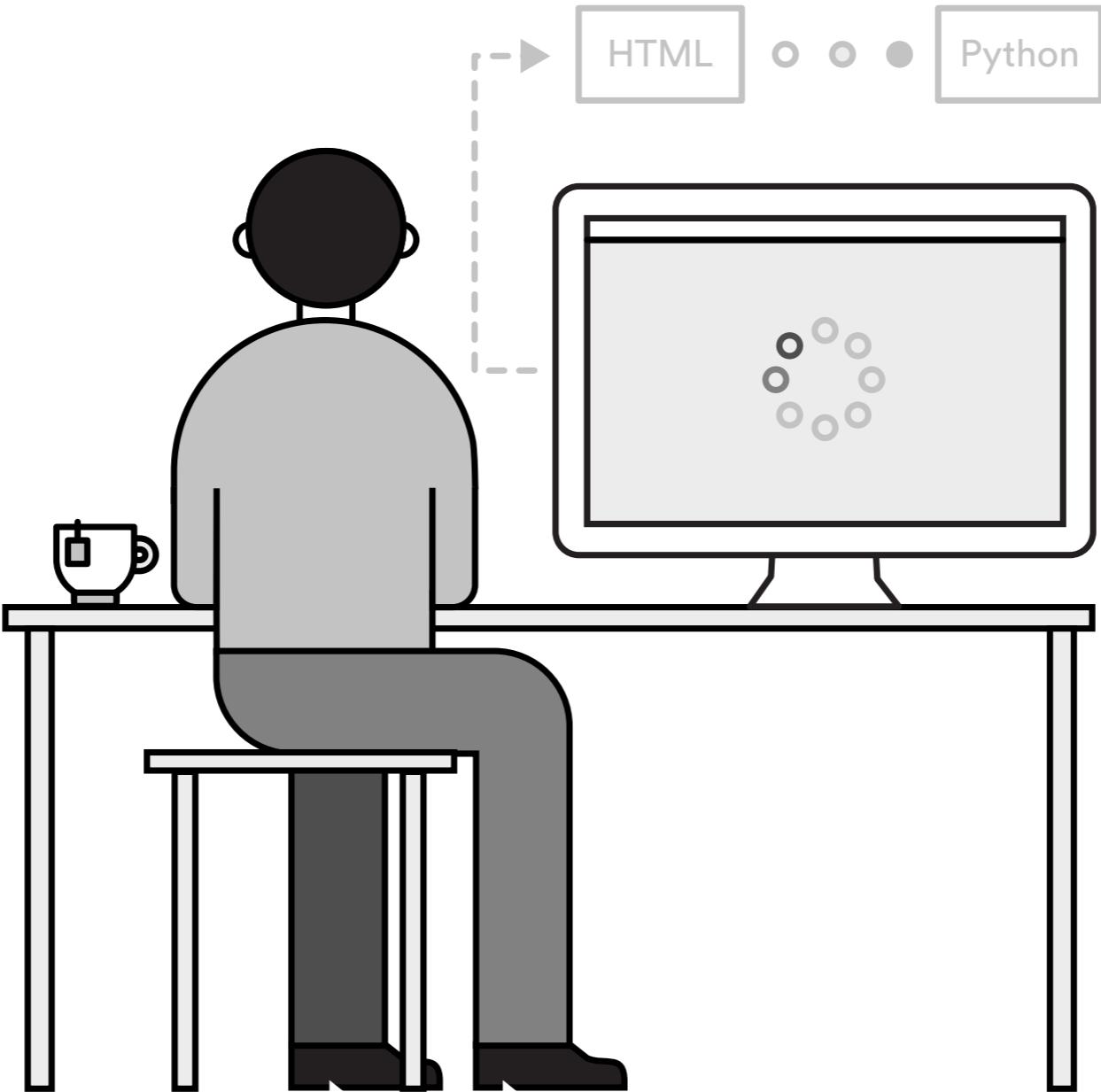
WHAT IS THE BACK END?

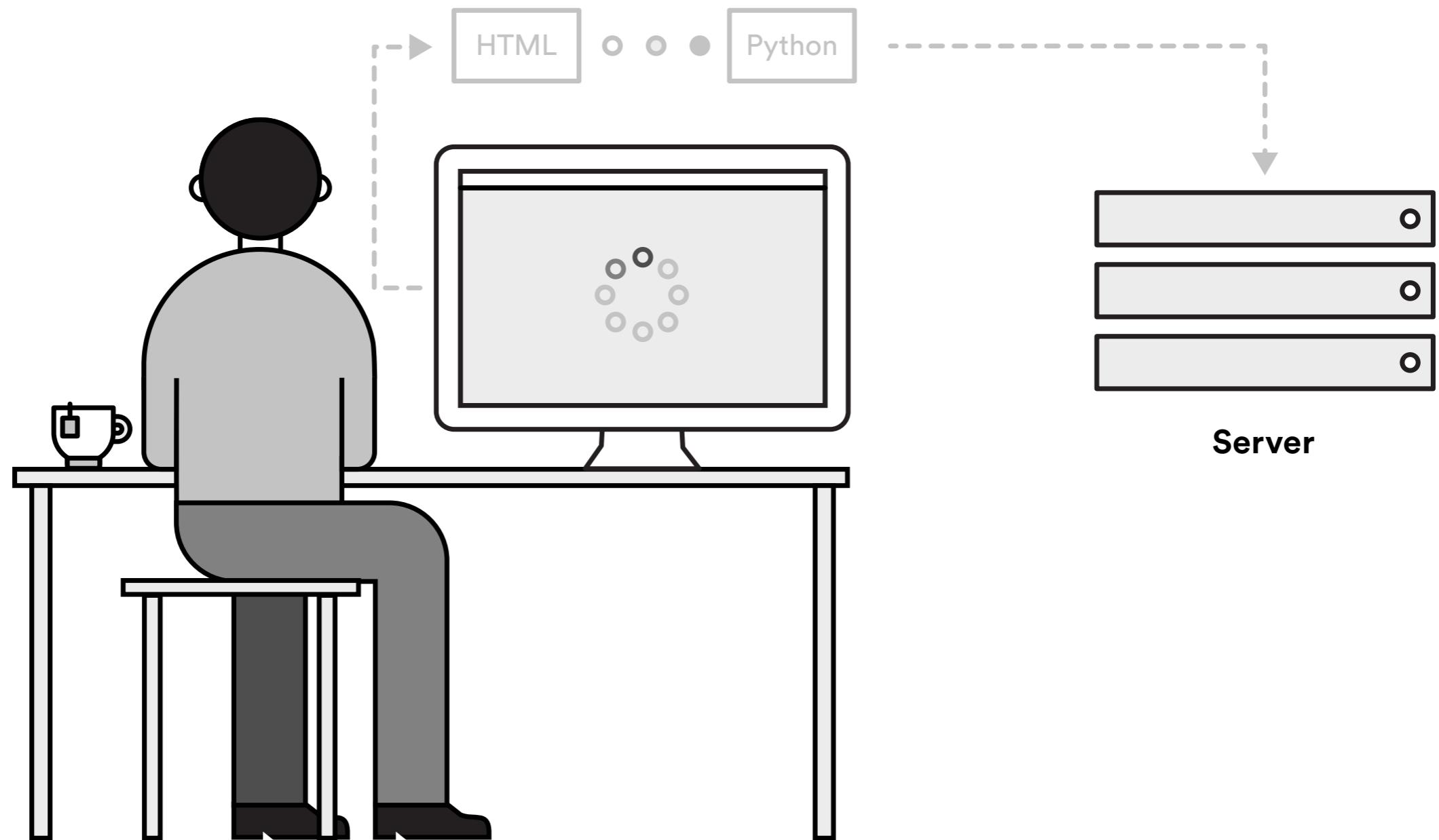
- It is what goes on behind the scenes
- Consists of databases, servers etc.
- Lots of languages:
 - Ruby (Ruby on Rails), Node.js, PHP, Python, C++ etc.

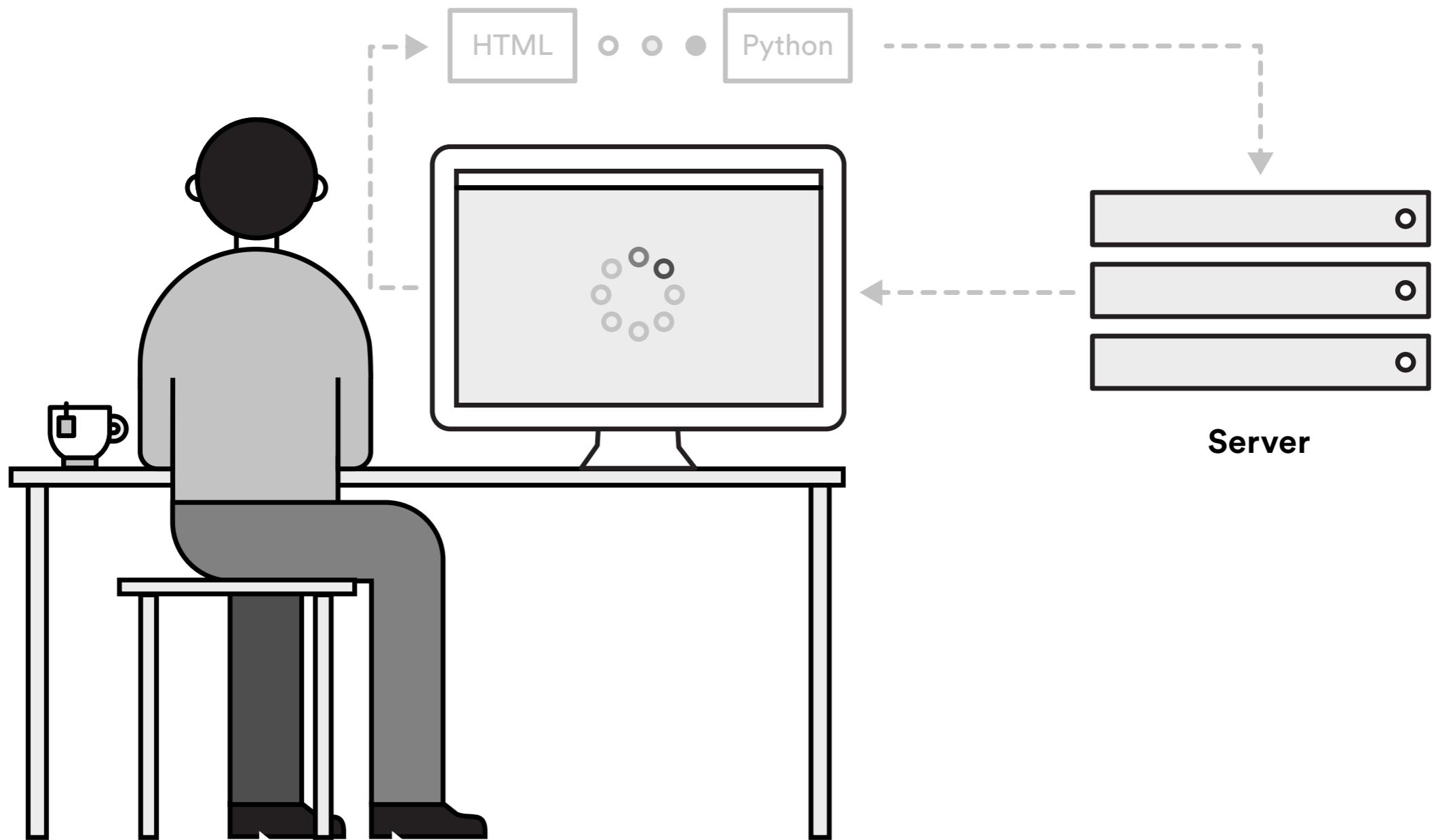


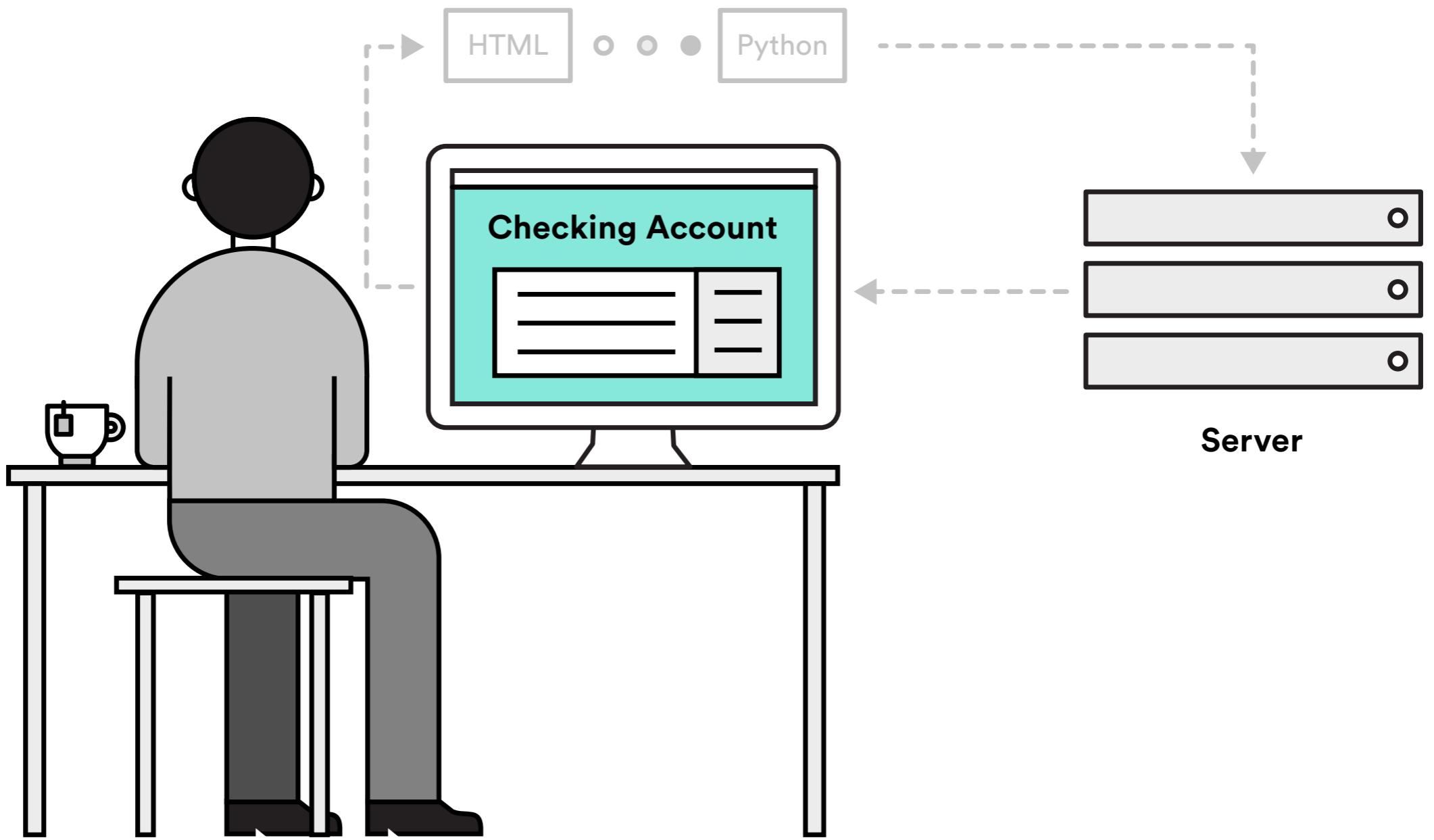












FRONT END LANGUAGES

FRONT END IS MADE UP OF...

HTML

CSS

JavaScript



FRONT END

THE LANGUAGES

HTML	<i>Defines the Content</i>	<i>“The Bones”</i>
CSS	<i>Assigns the style</i>	<i>“The Skin”</i>
JAVASCRIPT	<i>Adds the functionality</i>	<i>“The Brain”</i>

FRONT END

DEEP DIVE INTO HTML + CSS

FRONT END

- HTML is responsible for the markup(content)
 - e.g Site Planning
- CSS is responsible for the styling of the content
 - e.g Building Aesthetics



ACTIVITY: DISTINGUISH BETWEEN HTML, CSS, AND JS

EXERCISE

DIRECTIONS

1. Let's visit lyft.com together
2. The words "Rides in Minutes" appears due to _____?
3. The reason for which "Rides in Minutes" is centered and white is due to _____?
4. Hover over the word "Explore" in the navigation menu. That animation is most likely due to _____?

DELIVERABLE

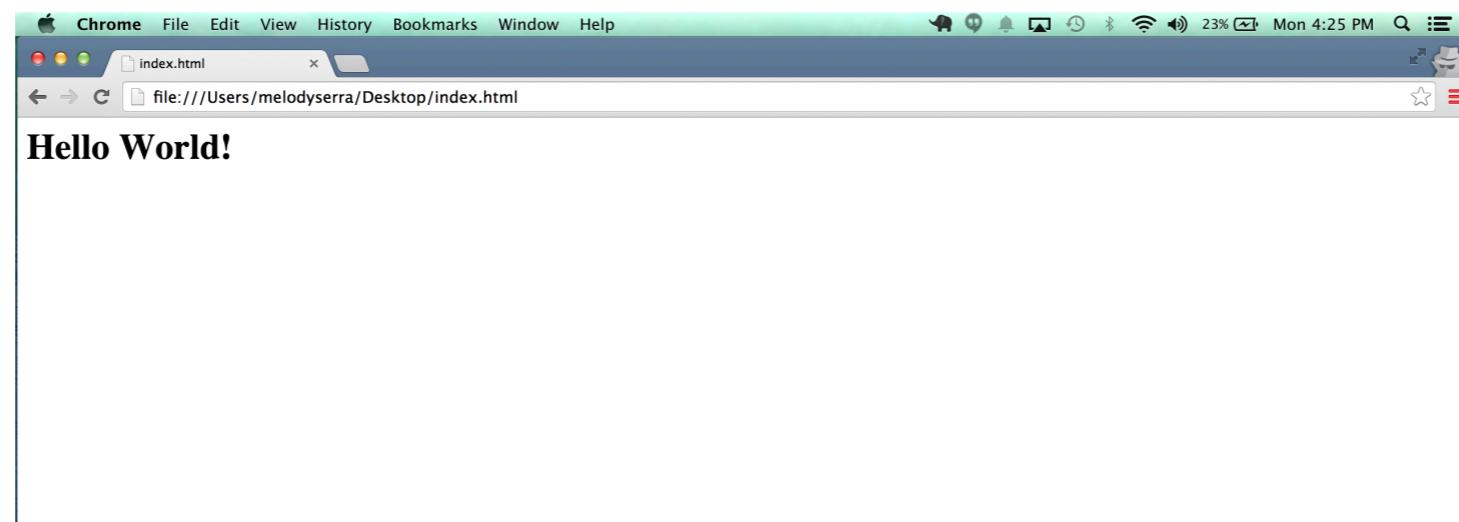
Continue to think about the different roles the three languages we discussed are playing as you visit more websites.

HTML : HYPER TEXT MARKUP LANGUAGE

- HTML is made up of tags
- Tags = < >
- Tags tell the browser how to format content
- e.g Will the content be formatted as an image or as a link?

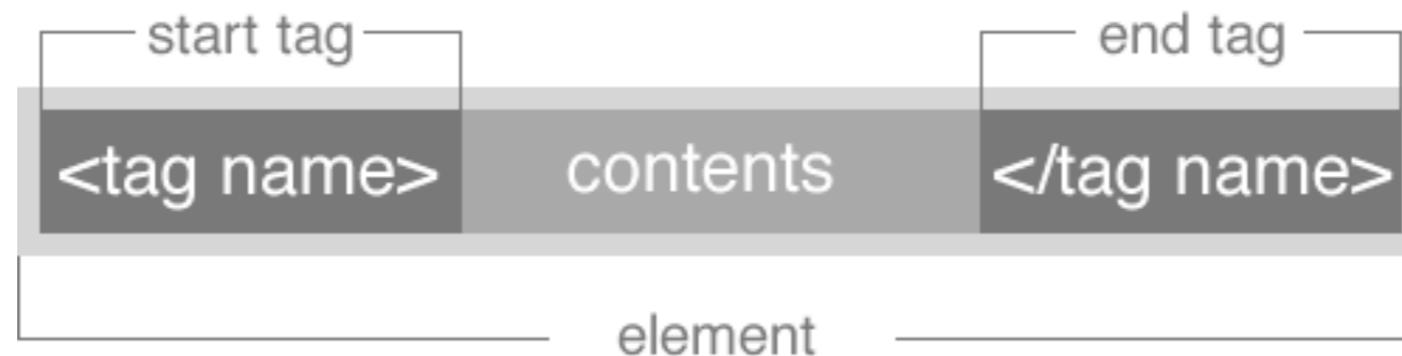
opening tag, type declaration what is rendered closing tag

```
<h1>Hello World! </h1>
```



FRONT END: HTML

HTML SYNTAX



FRONT END

GUIDED PRACTICE

HTML CODE-ALONG

1. OPEN YOUR BROWSER AND
NAVIGATE TO

CODEPEN.IO

HTML CODE-ALONG

“Browser, show ‘Hello!’ as a header.”

```
<h1>Hello!</h1>
```



OPENING TAG



CLOSING TAG



HEADING TAGS CREATE TEXT HEADINGS IN A HIERARCHY

<h1>Most important HEADING</h1>

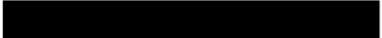
<h2>Second Most Important Heading</h2>

<h3> Third Most Important Heading</h3>

<h4> Fourth Most Important Heading</h4>

<h5> Fifth Most Important Heading</h5>

<h6>Least Important Heading</h6>



PARAGRAPH TAGS

<p>

This is a paragraph. Usually, these are used for blocks of text that have two or more sentences.

</p>

NOT ALL TAGS HAVE CLOSING TAGS...

“Browser, please add a line break in my text”

```
<p>  
line  
<br /> ← LINE BREAK TAG  
break  
</p>
```

OPEN TAGS

Line break tags are open tags.
This means they do not need an “end tag”.

<p>
line

break
</p>

THE SAME AS...

<p>
line

break
</p>

TAGS CAN BE PLACED INSIDE OTHER TAGS

```
<ol>
  <li>First item</li>
  <li>Second item</li>
</ol>
```

ORDERED LISTS (NUMBERED LISTS)

```
<ol>
  <li>First item</li>
  <li>Second item</li>
  <li>Third item</li>
</ol>
```



UNORDERED LIST (BULLET LISTS)

```
<ul>  
  <li>Bullet item</li>  
  <li>Bullet item</li>  
</ul>
```

THE IMAGE TAG

PLACE KITTEN

```

```

```
<img src="">
```



LINKS

```
<a href="http://google.com">Google</a>
```

```
<a href="">Label</a>
```

HTML

BASIC LAYOUT OF AN HTML DOCUMENT

HTML

```
<!DOCTYPE html>
<html>
<head> — sets off title and info that won't be displayed
    <title>My first webpage</title>
    <meta charset="UTF-8"> — sets character encoding
</head>
<body> — visible portion
    <h1>Hello World!</h1>
</body>
</html> — ends the HTML document
```

ACTIVITY: CREATING YOUR FIRST HTML FILE

DIRECTIONS



EXERCISE

1. Create a folder on your desktop and title it “Coding 101”
2. Open up the folder you just made in your text editor
3. Save your file as “index.html”
4. Type out the HTML basic layout
5. Open up the HTML file in Google Chrome
6. Add more content tags: h1-h6, p, ul/li, button, a, img to create an “About Me” webpage
7. Keep your editor open

CSS : CASCADING STYLE SHEETS

BASIC LAYOUT OF
AN EXTERNAL CSS
FILE

CSS : CASCADING STYLE SHEETS

- The symbol used in CSS is {
- CSS tells the browser how to style content
- e.g Will the paragraph content be pink or purple?

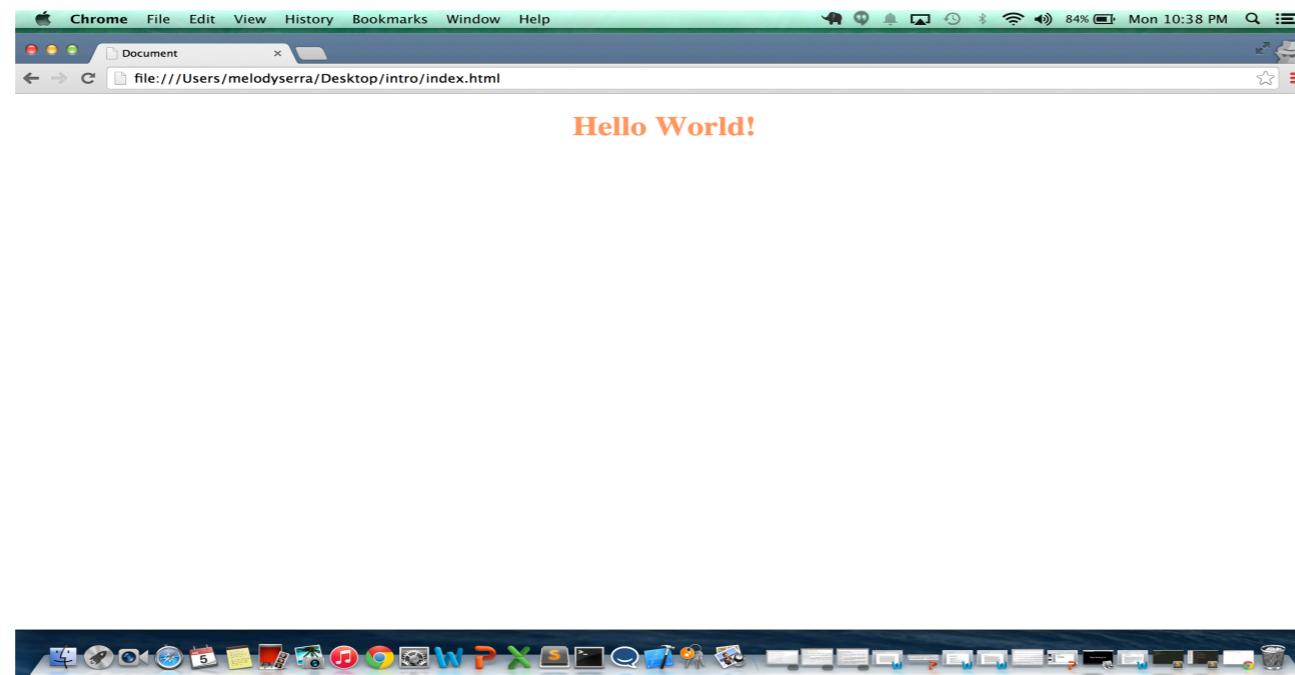
the selector, which HTML element you want to add style to

```
h1 {  
    color: #FF9966;  
    text-align: center;  
}
```

curly braces, all styles inside these will apply to the HTML elements that belong to the selector

HOW DO YOU CONNECT THE TWO FILES?

<link rel = “stylesheet” href=“style.css>



ACTIVITY: CREATING YOUR FIRST CSS FILE

DIRECTIONS



EXERCISE

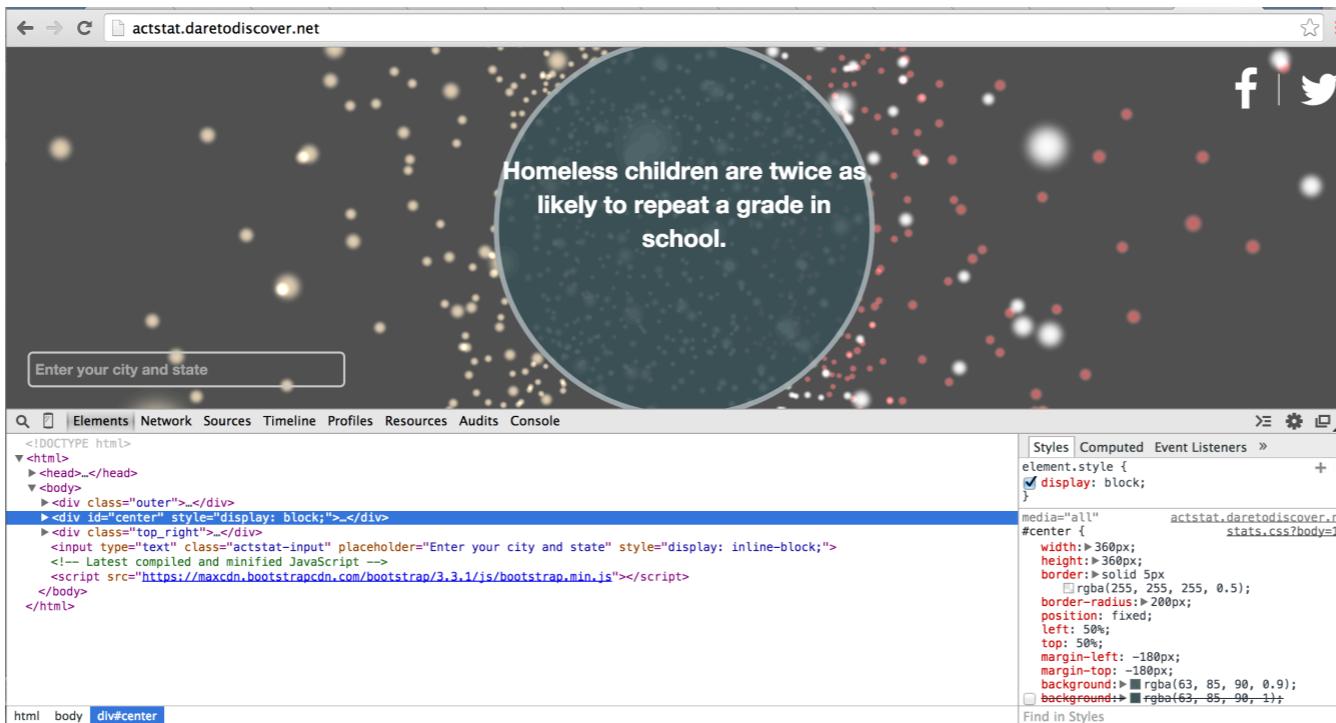
1. You should still have the “Coding 101” folder open in your editor
2. Create a new file from the editor, save the file as “style.css”
3. Add a few CSS properties(color, background-color, font-family, text-align) to the content created in the last activity
4. Connect your external CSS file to your HTML file
5. Open up the HTML file in Google Chrome

FRONT END

**HOW CAN YOU
EDIT AN EXISTING
WEBPAGE**

HOW CAN YOU EDIT AN EXISTING WEBPAGE?

- Open the developer tools
- Can be used as a “console” to test new code/change code and see what it looks like



CODING 101 : HTML + CSS

WRAP-UP

**SO, WHO NEEDS TO
KNOW ABOUT THIS
STUFF?**

WRAP UP



Business
Managers



Product
Managers



Designers



Marketers



Programmers

CODING 101 : HTML + CSS

HOW TO LEARN THIS AT GA?



PART-TIME:
JS/FEWD



ONLINE:
HCD



FULL-TIME:
WDI / WDIR

CODING 101 : HTML + CSS

REFERENCE PAGES:

- Mozilla Developer Network
- W3Schools
- CSS Tricks
- Web Field Manual
- Free IT Books
- JSDB.io
- Site Point
- Codrops

CODING 101 : HTML + CSS

STAYING CURRENT

- Smashing Magazine
- Sidebar.io
- Codrops
- Medium
- A List Apart
- Web Designer Weekly
- Creative Bloq
- CSS Tricks
- Codepen.io

CODING 101 : HTML + CSS

SITE INSPIRATION

- Awwwards
- Site Inspire
- Mediaqueri.es
- One Page Love
- Little Big Details
- The Best Designs
- CSS Design Awards
- Web Design File
- Behance
- Dribbble
- Responsive Patterns

CODING 101 : HTML + CSS

A COUPLE OF LAST THINGS

You are going to get lots of errors...

Google first, ask questions later (but don't be afraid to ask)
[Stack Overflow](#) is great for this stuff!

Get immersed! Coding is hard if you don't get really involved.

ACTIVITY: AFTER CLASS YOU CAN...

DIRECTIONS



EXERCISE

1. Go to dash.ga.co
2. There are 5 projects available to you that cover what we went over tonight and more!

CODING 101 : HTML + CSS

Q & A

THANKS!

NAME

- Optional Information:
- Email?
- Website?
- Twitter?